

I. *Part of a Letter to the Publisher, from the Reverend Mr. Abr. de la Pryme, giving an Account of some Observations he made concerning Vegetation.*

SOME have made Experiments of the Meliorating, Fertilizing and Multiplying of Grain, by steeping them in divers Liquors. *Digby* somewhere mentions a Plant of Barley, all rising from one Corn, that by steeping and watering with Saltpetre, dissolv'd in Water, brought forth 249 Stalks, and above 18000 Grains. And the last Edition of *Cambden* mentions a thing very observable, that the Corn sown in a Field in *Cornwal*, after a great Battle in the Civil War time, brought forth 4 or 5 Ears on every Stalk. I have tryed some such like Experiments on several Grains, and tho' I have not been so happy, as to meet with that increase therein that I expected, yet as some of them were diverting to me in beholding, and perhaps may be to you in reading, so I will fill this Letter with some of them, that it may not come to you empty.

Upon the 22d of *March*, 1699. I laid to steep,

A Pea, a Barley Corn, and a Wheat Corn, in Brimstone Water.

A Pea, a Wheat, a Barley and an Oat Corn, in Allom Water.

A Pea, a Wheat, a Barley, and an Oat Corn, in an old Dissol. of Salt of Tartar.

A Pea, a Wheat, a Barley, and an Oat, in the Cap. Mort. of Sal Arm. dissolved in Urine.

A Pea, a Wheat, a Barley, and an Oat, in the dissolve of the Salt of Walls.

A Pea, a Wheat, a Barley, and an Oat, in the dissol. of Saltpetre.

A Pea,

A Pea, a Wheat, a Barley, and an Oat in *Nostoc* or Star Gelly.

A Pea, a Wheat, a Barley and an Oat Corn in Urine.

I steep'd them thus 5 days and 5 nights, and set them in a Garden in a good Soil, against a North Wall, full in the Sun, on the 27th of the same Month, after a rainy Night, with a Pea, a Wheat, a Barley, and an Oat unsteeped.

Upon the 10th of *April* following, I went to see them, and found that some were just come up, some not.

The Pea, the Barley and the Wheat steep'd in Brimstone Water, all up together.

The Pea steep'd in Alom Water very big and swell'd, but not so much as sprouted, but the Barley, Wheat and Oat above ground.

The Pea steeped in an old solution of Salt of Tartar, was half come up, the Wheat scarce sprouted, but the Barley and Oat quite up.

The Pea, the Wheat, the Barley and Oat steep'd in the *Caput Mort.* of *Sal Armoniac* dissolv'd in Urine, were all up together; as were also the next row that were steep'd in the Solution of Salt of Walls.

The Pea and Wheat steep'd in the dissolution of Saltpetre, were about half up, but the Barley and Oat quite up.

Those which were steep'd in *Nostoc*, were none of them come up, nor scarce sprouted.

The Barley and Oat steeped in Urine were come up, but the Pea and Wheat scarce sprouted.

And lastly, to my great surprize, the Pea, the Wheat, the Barley and the Oat that were not at all steeped, were all of them as soon up as any of the former, except only the Wheat, which was about half up.

I set them all a Finger deep in the Ground, and there was all the time of their growth very fine Weather.

From all which I humbly suppose that Allom Water is against the nature of Peas, and retards their growth, but agrees well enough with Wheat, Barley and Oats. That

That the solution of Salt of Tartar is not friendly to the nature either of Peas or Wheat, but agreeable or concordant to the nature of the Oats and Barley.

That the Water of Saltpetre had not here any of the great Power or Vertue I expected, &c.

And that these steepings did not further any of the said Grains in their growth and coming up, but manifestly and plainly retarded some or most of them.

Then I digged them all up but three spires of Barley, which I let stand about a foot and a half, or two foot, one from another, which grew and increased so exceedingly, that they had sixty, sixty five, and sixty seven stalks apiece from their single Grain and Root, with every one an Ear on, and about forty or somewhat more Corns apiece in them, which increase perhaps proceeded not so much from the Grain having been steeped in any Liquors, as from the fertility and goodness of the Soil, and their competent Distance one from another. I observed that new shoots continually struck up from the Root; and that, as in the *East* and *West Indies*, there are Trees that always bear Blossoms and Flowers, green and ripe Fruit at the same time; so that here if the enlivening heat of the Sun had not been cool'd and weakened by the approach of the Winter Season, there would have continually been new, ripe Corn, and empty Ears on the same Root.